

REMARKS

This is a full and timely response to the non-final Office Action of May 17, 2007.

Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Fourth Response, claims 1, 3-18, 20-26, 28-48, 52, 58, and 59 are pending in this application. Claims 1, 3, 4, 18, 20, 21, 34, 35, 42, 43, 45, and 52 are directly amended herein, and claims 4-17, 21-26, 28-33, 35-41, and 46-48 are allowed. Further, claims 2, 19, and 53-57 are canceled via the amendments set forth herein, and claims 58 and 59 are newly added. It is believed that the foregoing amendments add no new matter to the present application.

Response to §102 Rejections

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).

Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg* (U.S. Patent No. 5,748,308). Claim 1, as amended, reads as follows:

1. A spectral correlator, comprising:
a specimen; and

an optical device configured to collect light from the specimen, the optical device having a wavelength spreading element configured to disperse, based on wavelength, a received first spectra of the light collected from the specimen, the optical device configured to optically determine a similarity of the dispersed first spectra and a second known spectra of at least one substance by directly comparing the dispersed first spectra to a representation of the second known spectra, *wherein the optical device has a spatial filter indicative of the representation of the second known spectra, the filter configured to filter the received first spectra such that the received first spectra is optically multiplied with the second known spectra thereby transmitting from the filter a filtered optical signal indicative of the similarity, wherein an intensity of the filtered optical signal is greater if the at least one substance is present in the specimen.* (Emphasis added).

Applicant respectfully asserts that *Lindberg* fails to disclose at least the features of claim 1 highlighted above.

In this regard, *Lindberg* discloses a spatial filter 108 that selectively attenuates a received light beam. See column 4, lines 64-67. However, there is nothing in *Lindberg* to indicate that the filter 108 "optically multiplies" the alleged "first spectra" with the alleged "second known spectra" of a substance such that the filtered optical signal transmitted from the filter 108 has an intensity that is greater if the substance is present in the specimen. Thus, *Lindberg* fails to disclose at least "wherein the optical device has a spatial filter indicative of the representation of the second known spectra, the filter configured to filter the received first spectra such that the received first spectra is **optically multiplied** with the second known spectra thereby transmitting from the filter a filtered optical signal indicative of the similarity, **wherein an intensity of the filtered optical signal is greater if the at least one substance is present in the specimen,**" as recited by claim 1.

For at least the above reasons, Applicant respectfully asserts that *Lindberg* fails to disclose each feature of claim 1, and the 35 U.S.C. §102 rejection of claim 1 should be withdrawn.

Claim 3

Claim 3 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Applicant submits that the pending dependent claim 3 contains all features of its independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claim 3 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 18

Claim 18 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Claim 18, as amended, reads as follows:

18. A spectral correlator, comprising:
a specimen;
an illuminating device configured to illuminate the specimen; and
an optical device having a wavelength spreading element and a spatial filter indicative of a known spectra of at least one substance, the wavelength spreading element configured to disperse a spectra defined by light from the specimen, ***the filter configured to filter the dispersed spectra such that the dispersed spectra is optically multiplied with the known spectra thereby transmitting from the filter a filtered spectra indicative of a degree of similarity between the dispersed spectra and the known spectra, wherein an intensity of the filtered spectra is greater if the at least one substance is present in the specimen.*** (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of pending claim 1, Applicant respectfully asserts that *Lindberg* fails to disclose at least the features of claim 18 highlighted hereinabove. Accordingly, the 35 U.S.C. §102 rejection of claim 18 should be withdrawn.

Claim 20

Claim 20 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Applicant submits that the pending dependent claim 20 contains all features of its independent claim 18. Since claim 18 should be allowed, as argued hereinabove, pending dependent claim 20 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 34

Claim 34 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Claim 34, as amended, reads as follows:

34. A spectral correlator, comprising:
a specimen;
means for receiving light reflected off and/or emitted by the specimen;
means for separating the light into its component colors thereby providing a dispersed spectra; and
means for optically correlating the dispersed spectra to determine a similarity of the dispersed spectra and a second known spectra of at least one substance, the correlating means having an optical filter for filtering the dispersed spectra, *the optical filter indicative of the second known spectra such that the filtered light from the filter has an Intensity indicative of the degree to which the dispersed spectra and the second known spectra are similar, wherein the optical filter is configured to optically multiply the dispersed spectra with the second known spectra such that the Intensity is greater if the at least one substance is present in the specimen.*
(Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of pending claim 1, Applicant respectfully asserts that *Lindberg* fails to disclose at least the features of claim 34 highlighted hereinabove. Accordingly, the 35 U.S.C. §102 rejection of claim 34 should be withdrawn.

Claim 42

Claim 42 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Claim 42 presently reads as follows:

42. A spectral correlation method, comprising the steps of:
receiving light from a specimen;
separating a first spectra of the light into its component colors thereby providing a separated first spectra;
filtering the separated first spectra with a spatial filter indicative of a representation of a known second spectra of at least one substance to provide an optical signal indicative of the degree to which the first spectra and the known second spectra are similar, *the filtering step comprising the step of optically multiplying the separated first spectra with the known second spectra such that the optical signal has an intensity that is greater if the at least one substance is present in the specimen;*
transmitting the optical signal from the filter; and
detecting the optical signal. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicant respectfully asserts that *Lindberg* fails to disclose at least the features of claim 42 highlighted hereinabove. Accordingly, Applicant requests that the 35 U.S.C. §102 rejection of claim 42 be withdrawn.

Claim 44

Claim 44 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Applicant submits that the pending dependent claim 44 contains all features of its independent claim 42. Since claim 42 should be allowed, as argued hereinabove, pending dependent claim 44 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 45

Claim 45 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. Claim 45 presently reads as follows:

45. A spectral correlation method, comprising the steps of:
 - receiving light from a specimen;
 - separating the light into its component colors thereby providing a dispersed spectra;
 - filtering the dispersed spectra with a spatial filter indicative of a known spectra corresponding to at least one substance to provide a filtered spectra, *the filtering step comprising the step of optically multiplying the dispersed spectra with the known spectra such that the filtered spectra has a greater intensity if the at least one substance is present in the specimen*;
 - determining whether the at least one substance is present in the specimen based on the filtered spectra; and
 - providing an indication as to whether the at least one substance is present in the specimen based on the determining step. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicant respectfully asserts that *Lindberg* fails to disclose at least the features of claim 45 highlighted hereinabove. Accordingly, Applicant requests that the 35 U.S.C. §102 rejection of claim 45 be withdrawn.

Claim 52

Claim 52 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Lindberg*. However, similar to allowable claim 43, claim 52 has been amended herein to recite “the optical device configured to store a threshold and to measure an intensity of the optical signal thereby providing a measured value, the optical device further configured to perform a comparison between the measured value and the threshold and to provide an indication as to whether at least one substance is present in the specimen based on the comparison.” Applicant respectfully asserts that *Lindberg* fails to disclose at least the foregoing features of claim 52. Thus, Applicant requests that the 35 U.S.C. §102 rejection of claim 52 be withdrawn.

Claims 58 and 59

Claims 58 and 59 have been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 58 and 59 contain all features of their respective independent claim 4. Since claim 4 has been allowed, pending dependent claims 58 and 59 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Allowable Subject Matter

Claim 43 has been indicated as allowable by the outstanding Office Action if such claim is rewritten to include the limitations of its base claims. Accordingly, pending claim 43 has been amended herein to include the features of its base claim 42, and Applicant respectfully requests that the objection to claim 43 be withdrawn.

CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**

By:



Jon E. Holland

Reg. No. 41,077

100 Galleria Parkway, N.W.
Suite 1750
Atlanta, Georgia 30339
(256) 704-3900 Ext. 103